

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/055,641
Filed: January 22, 2002
Inventor:
Bernard A. Traversat, et al.

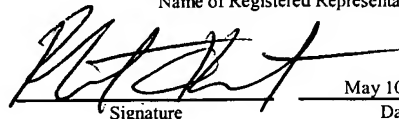
Title: RENDEZVOUS FOR
LOCATING PEER-TO-
PEER RESOURCES

Examiner: Nguyen, Phuoc H
Group/Art Unit: 2143
Atty. Dkt. No: 5681-07200

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Robert C. Kowert

Name of Registered Representative



Signature

May 10, 2006

Date

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reasons stated below.

Claims 1-203 remain pending in the application. Reconsideration of the present application is earnestly requested in light of the following remarks. Please note that for brevity, only the primary arguments directed to the independent claims are presented, and that additional arguments, e.g., directed to the subject matter of the dependent claims, will be presented if and when the case proceeds to Appeal.

Section 103(a) Rejection:

Claims 1-44, 48-82, 86-105, 109-143, 147-157, and 160-203 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dutta et al. (U.S. Publication 2002/0073075) (hereinafter "Dutta") in view of Borella et al. (U.S. Patent 6,269,099) (hereinafter "Borella"), and claims 45-47, 83-85, 106-108, 144-146, 158, and 159 as being unpatentable over Dutta and Borella, and in further view of Dutta et al. (U.S. Publication 2002/0073204) (hereinafter "Dutta '204"). **Applicants submit that the Examiner has failed to support a *prima facie* rejection of each of these claims.** Applicants note the following clear errors in the Examiner's rejection.

Regarding the rejection of claim 1, contrary to the Examiner's assertion, Dutta in view of Borella clearly fails to teach or suggest a core layer comprising one or more peer-to-peer platform protocols for

enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment. The Examiner cites Dutta (page 3, paragraphs 0038 and 0040) as teaching this limitation. These paragraphs describe nodes within a peer-to-peer network acting as a distributed file sharing system, in which the nodes act cooperatively to form a distributed search engine, and the use of connection host lists that identify nodes to which each peer node is connected. They do not describe a core layer, including one or more peer-to-peer platform protocols, nor cooperating to form peer groups and share network resources, as discussed above. These limitations are not taught or suggested anywhere in Dutta or Borella, or in the combination thereof.

In the Response to Arguments section of the Final Office Action, item A, the Examiner submits that in paragraphs [0037], [0048], and [0081] Dutta discloses a core layer comprising one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment. The Examiner submits that the layer comprising the Gnutella protocol is analogous to Applicants' core layer, and that using the resources of Dutta for searching or executing a query among peer groups is analogous to "sharing network resources". However, there is nothing in these citations, or elsewhere in Dutta, that teaches or suggests peer groups, or protocols to form peer groups, as recited in Applicants' claim 1. **The Gnutella protocol does not inherently provide for forming multiple peer groups.** Merely establishing a peer-to-peer connection between two peer nodes, as described in paragraph [0037], does not describe a core layer comprising a peer-to-peer platform protocol for enabling a plurality of peer nodes to cooperate with each other to form multiple peer groups. Similarly, while paragraph [0048] describes "Ping" and "Pong" messages of Gnutella for discovering other nodes on the network, this citation also does not describe peer groups or a protocol to form multiple peer groups, as recited in claim 1. Finally, paragraph [0081] describes discovering peer nodes at search time by determining the topology of the peer-to-peer network and inviting these nodes to become registered root nodes of the search engine. Again, there is nothing in this citation that teaches or suggests a peer-to-peer protocol for enabling a plurality of peer nodes to cooperate with each other to form multiple peer groups. Instead, it describes only that the search engine can expand its peer-to-peer connections for the purposes of broadening its search capability. Thus, the Examiner's rejection is completely unsupported by the actual teachings of the cited reference.

Further regarding claim 1, Dutta in view of Borella clearly fails to teach or suggest *one or more rendezvous nodes, wherein each rendezvous node is operable to cache one or more resource advertisements for discovery by the peer nodes on the peer-to-peer network.* The Examiner cites Dutta (page 4, paragraph [0045]; page 6, paragraph [0076]; and page 7, paragraph [0082]) as teaching this limitation. The first of these paragraphs describes a Globally Unique Identifier (GUID), contained in each message. When a node receives a search query, its GUID is compared with a stored list of GUIDs corresponding to search queries previously received by the node. Applicant assumes the Examiner means to equate these GUIDs with the resource advertisements of the present invention. However, as discussed below, GUIDs are not resource advertisements. Furthermore, there is nothing in Dutta that describes these GUIDs being cached by a rendezvous node. Nor does this portion of Dutta describe that the GUIDs are discovered by peer nodes on a peer-to-peer network. The Examiner's second and third citations refer to a registered root node, which Applicants assume the Examiner means to equate with the rendezvous node of the present invention. However, this registered root node is not described as operable to cache resource advertisements for discovery by the peer node on the peer-to-peer network, as recited in claim 1. Instead, Dutta's "root nodes" are described as: "the set of nodes to which a particular node connects" (paragraph [0041]) and a "registered root node" is described as a node which a user has registered as a "root node", e.g., to join a service operator's peer-to-peer network (paragraph [0053]).

In item B of the Final Office Action, the Examiner submits that Figure 4 clearly discloses the limitations discussed above. The Examiner submits that the registered root nodes which the server knows ahead of operation (in Dutta) are analogous to the rendezvous nodes of Applicants' claim 1. The Examiner

further submits that each root node caches one or more resource advertisements as the GUID (paragraph [0045]). The Examiner is clearly incorrect. Dutta's GUID (Globally Unique Identifier) is clearly not a resource advertisement. Instead, it is an identifier of a query message. Paragraph [0045] describes that this GUID is stored by receiving nodes so that if a duplicate query is received, the nodes may safely drop the packet containing the request. Therefore, this citation, and Dutta's GUIDs, clearly have nothing to do with a rendezvous node caching one or more resource advertisements, as recited in Applicants' claim 1.

Dutta in view of Borella also clearly fails to teach or suggest *one or more resource advertisements are formatted in accordance with the peer-to-peer platform discovery protocol*. The Examiner cites Dutta (page 3, paragraph [0032]) as teaching *one or more resource advertisements are formatted in accordance with the peer-to-peer platform protocol*, and admits that Dutta fails to teach that the one or more peer-to-peer platform protocols include *a discovery protocol*. However, the Examiner's citation in Dutta describes a browser for accessing hypertext documents (i.e., content) in a variety of file formats and types of files, not resource advertisements formatted in accordance with a peer-to-peer platform protocol, as recited in claim 1.

The Examiner relies on Borella to disclose *peer-to-peer protocols include a discovery protocol* (column 2, lines 49-57) and states that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Borella's teaching into Dutta's method to use the discovery protocol to identify one another in the peer-to-peer platform in order to enhance performance, reliability and security of data transmitted over the Internet to and from Autonomous Systems or other networks. However, there is no suggestion in the cited art or elsewhere that applying the teachings of Borella to Dutta's system would result in enhanced performance, reliability or security of data transmitted over the Internet. In item C of the Final Office Action, the Examiner submits that, "paragraph [0045] indicates that the format of GUID is not specifically defined (e.g., lines 3-4). Thus, Dutta discloses the one or more resource advertisements as returned GUID messages are formatted in accordance with the peer-to-peer platform discovery protocol." However, as discussed above regarding item B, GUIDs have nothing to do with resource advertisements. Therefore, the formatting of GUIDs, or the lack thereof, cannot teach or suggest anything about the formatting of resource advertisements according to the peer-to-peer platform discovery protocol.

In item D of the Final Office Action, the Examiner clearly **contradicts his own remarks** (in item C) by stating the following argument in support of his assertion (in item D) that Dutta in view of Borella teaches *one or more resource advertisements are formatted in accordance with the peer-to-peer platform discovery protocol*:

the previous rejection clearly states the only missing feature from the primary reference is a conventional discovery protocol in the peer-to-peer network wherein the secondary reference discloses the conventional discovery protocol in the peer-to-peer network. Therefore, it is obvious for the primary reference borrows the concept of the conventional discovery protocol in the peer-to-peer network to automatically discovering the peer nodes.

However, as discussed in Applicants' response to the Office Action of September 30, 2005, since Dutta's method does not rely on resource advertisements to identify nodes to each other, applying a discovery protocol to Dutta's method would still not result in the present invention, in which one or more resource advertisements for discovering the peer nodes are formatted in accordance with the peer-to-peer platform discovery protocol.

Furthermore, Applicants note that in the Final Action the Examiner failed to address many of Applicants' arguments. For example, the Examiner did not rebut Applicants' argument that the cited art fails to teach or suggest that each resource advertisement cached at a rendezvous node comprises *an indication of how to access a corresponding network resource*. The GUID of Dutta relied upon by the Examiner clearly has absolutely nothing to do with providing an indication of how to access a corresponding network resource. The Examiner previously cited Dutta (page 5, paragraph [0062]) as teaching this

limitation. However, this citation does not describe GUIDs or resource advertisements, but instead describes search hits comprising hyperlinks containing the title of a web page or other file or document matching a search query. **This limitation is also clearly not taught or suggested by Dutta's GUIDs, since GUIDs are identifiers of query messages and have nothing to do with resource advertisements, much less with an indication of how to access these resources.** Finally, these search links are not described as being cached by a rendezvous node, as recited in claim 1.

Applicants remind the Examiner that, "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)", as stated in MPEP §2142. As discussed above, at least two of these criteria have not been met in the Examiner's rejection of claim 1. First, there is not sufficient motivation shown to combine the teachings of Dutta and Borella. Second, incorporating the discovery protocol as disclosed by Borella with the methods of Dutta clearly would not produce the present invention. As discussed in detail above, the prior art references, taken separately or in combination, clearly do not teach all the limitations of claim 1. Therefore, for at least the reasons above, the rejection of claim 1 is not supported by the cited art and removal thereof is respectfully requested.

Applicants' discussion above regarding claim 1 applies also to independent claim 86, which recites a peer-to-peer network comprising a plurality of peer nodes, one or more rendezvous node, and means for implementing the operations of the peer nodes and rendezvous nodes recited in claim 1; independent claim 109, which recites a method for implementing the operations of the peer nodes and rendezvous nodes recited in claim 1; and independent claim 160, which recites a tangible, computer-accessible storage medium comprising program instructions computer-executable to implement the operations of the peer nodes and rendezvous nodes recited in claim 1.

In a telephone interview with Examiner Nguyen on May 9, 2006, Examiner Nguyen stated that the above arguments were persuasive in regard to claims 1-47, 86-146 and 160-193. The Examiner stated that claims 1-47, 86-146 and 160-193 were allowable (with minor modification to claim 86).

Regarding claim 48, Dutta in view of Borella clearly fails to teach or suggest *a rendezvous node, comprising a processor, a port operable to couple the peer node to a network, and a memory operable to store program instructions, wherein the program instructions are executable by the processor to communicate with one or more peer nodes on a peer-to-peer network and cache one or more resource advertisements for network resources, wherein each of said resource advertisements comprises an indication of how to access the corresponding network resource, wherein said resource advertisements are discoverable by said one or more peer nodes.* As discussed above regarding claim 1, the Examiner's citations do not teach or suggest cached one or more resource advertisements for network resources. Dutta in view of Borella also clearly fails to teach or disclose the additional limitations of claim 48, including various components of a rendezvous node, which comprises a processor, a port and a memory operable to store program instructions executable by the processor to implement the operations of the rendezvous node (as discussed above regarding claim 1).

The Examiner rejected independent claim 48 under the same rationale as claim 1. However, the scope of claim 48 differs from that of claim 1. **Since the Examiner failed to address the differences between claim 1 and claim 48, the Examiner has failed to state a *prima facie* rejection of claim 48. Furthermore, in the Final Office Action, the Examiner failed to address Applicants' arguments in**

regard to claim 48. Moreover, the Examiner stated in the telephone interview of May 9, 2006 that the rejection of claim 1 was being withdrawn. Since the Examiner has provided no other basis for the rejection of claim 48, the rejection of claim 48 is improper. For at least the reasons above, the rejection of claim 48 is not supported by the cited art and removal thereof is respectfully requested.

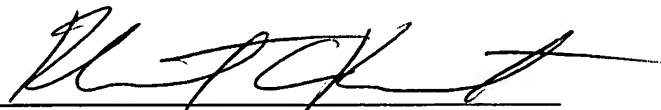
Applicants' discussion above regarding claim 48 applies also to independent claim 147 which recites a method for implementing the operations of a rendezvous node, as recited in claim 48; and to independent claim 194, which recites a tangible, computer-accessible storage medium comprising program instructions executable to implement the operations of a rendezvous node, as recited in claim 48. **Claims 147 and 194 also include the additional limitation of one or more peer nodes discovering said resource advertisements. This additional limitation is clearly not taught by Dutta or Borella, or by the combination thereof.** The Examiner rejected independent claims 147 and 194 under the same rationale as claim 1. However, the scope of claims 147 and 194 differs from that of claim 1. Since the Examiner failed to address the differences between claim 1 and claims 147 and 194, **the Examiner has failed to state a prima facie rejection of claims 147 and 194.** Moreover, in the Final Office Action, the Examiner failed to address Applicants' arguments in regard to claims 147 and 194. For at least the reasons above, the rejection of claims 147 and 194 are unsupported by the cited art and removal thereof is respectfully requested.

In light of the foregoing remarks, Applicants submit the application is in condition for allowance, and prompt notice to that effect is respectfully requested. If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicants hereby petition for such an extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 501505/5181-66200/RCK.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☒ Notice of Appeal

Respectfully submitted,



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